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Federal Communications Commission

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

WASHINGTON, D.C. 20554

ORIGINAL

In the Matter of

Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them PR Docket No. 92-235

To: The Commission

COMMENTS OF OFFSHORE NAVIGATION, INC.

Offshore Navigation, Inc. (ONI), by its attorneys, hereby submits these Comments in response to the Notice of Proposed Rulemaking (NPRM) issued by the Federal Communications Commission in the above-captioned proceeding.1/

I.

STATEMENT OF INTEREST

Offshore Navigation, Inc. is a corporation whose primary business is the rendition of commercial radio-positioning services on a worldwide basis. ONI,

1/ 7 FCC Rcd. 8105 (1992). The date for filing comments was extended to May 28, 1993. 8 FCC Rcd. 1501 (1993).

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incorporated under the laws of Delaware, has its principal office located in the metropolitan area of New Orleans, Louisiana. ONI has rendered radiopositioning services since 1946.

II.

COMMENTS

ONI recognizes that the radio spectrum between 150 and 512 MHz is congested and, therefore, appreciates the Commission's need to "refarm" the spectrum. While the Commission's NPRM is not directed specifically at radiologation systems, these systems would be affected by

A. The Commission Should Retain the Grandfathering Provision for Frequencies in the 1605-1715 kHz Band.

The rules governing radiolocation operations are proposed to be moved from Subpart F of Part 90 to new Sections 88.1107-1175. Under the current regulations at 47 C.F.R. § 90.103(b), radiolocation operations authorized prior to September 30, 1985 at 1605-1705 kHz are grandfathered to allow continued operation, secondary to AM Broadcast stations. This provision is not retained under the NPRM.

ONI currently operates a radiopositioning system using spread spectrum technology under the trade name of SPOT.

SPOT transmits over a bandwidth of 156 kHz in the 1605-1780 kHz band. At full operating capacity, the SPOT system utilizes 24 separate carrier frequencies with spectral lines interleaved at 4.77 Hz spacing. SPOT transmits 4094 discrete frequencies separated by 38.15 Hz. the SPOT system has a nominal power output of 10 watts and a computed effective radiated output of 7 watts. Within 40 kHz of the center frequency, excluding the power peak of the Acquisition signal, the average power density is approximately 80 milliwatts/kilohertz of bandwidth,

decreasing to approximately 8 milliwatts/kilohertz at 60 kHz offset, and to zero at approximately 78 kHz offset.

ONI's SPOT system utilizes spread spectrum system technology in the 1605-1780 kHz bandwidth to overcome the effects of skywave propagation characteristics that limit nighttime service range of conventional radiopositioning systems. This system, originally licensed in 1984, operates on a secondary basis with other licensees. Given the technical parameters of system operation described above, the potential for causing harmful interference is virtually nil. In consideration of the non-interfering quality of this signal, the Commission in May 1992 waived the "developmental" status of SPOT system license authority and issued regular licenses.

It is not possible to operate this system at the 1900-2000 kHz bandwidth because the system requires 156 kHz of bandwidth. Permitting ONI to continue operation of the SPOT system at its current bandwidth is consistent with one of the primary policies behind the Commission's NPRM -- to foster spectrally efficient technology. Therefore, ONI urges the Commission to retain the frequency allotment and the current grandfathering provision at Section 90.103(b)(28) for radiolocation operations at 1605-1715 kHz.

B. The Commission Should Retain Exclusivity at 1715-1800 kHz.

Currently, the rules provide for radiolocation station exclusivity at 1750-1800 kHz. See, Section 90.103(c)(7). While the Commission has carried forward the exclusivity provision for 1950-2000 kHz into the new Part 88, compare 90.103(c)(26) with proposed Section 88.113(j), it has not carried forward the exclusivity at 1750-1800 kHz. ONI presumes this was a matter of inadvertence, inasmuch as station exclusivity at 1750-1800 kHz has been a feature of the radiolocation service for several decades, and is well ingrained in the radiolocation licensing scheme.

Accordingly, ONI respectfully requests that the exclusivity provision of Section 90.103(c)(6) be carried forward into the new Part 88.

C. The Commission Should Modify its Power Levels for Itinerant Frequencies.

ONI also is interested in the Business Radio Service and in what under the NPRM would be the new General Pool.

ONI currently is developing a differential data link system to operate at 450-470 MHz. It operates at a power output of

100 watts. Inasmuch as commercial radiolocation entails the rendition of service on a contract basis at customerspecified locations, it is essential that provision be retained in the Commission's rules for itinerant operation to support this system.

ONI could not license the differential data link system on conventional channels since, inasmuch as such systems are used at temporary locations, ONI would not enjoy co-equal status vis-à-vis other users or EUO licensees. Accordingly, ONI would be required to license this system on itinerant use frequencies. Under the NPRM, however, the power limit for itinerant frequencies is 35 watts output. See Section 88.957. This proposed 35-watt itinerant-use power limit would not allow ONI to cover the required service area. Consequently, ONI requests that the Commission modify Section 88.957 to increase the power limit for itinerant frequencies, at least for a family of four (4) itinerant use channel pairs, to 100 watts.

III.

CONCLUSION

WHEREFORE, THE PREMISES CONSIDERED, Offshore Navigation, Inc. hereby requests that the Federal

Communications Commission modify its proposed Part 88 rules as suggested above, to preserve existing radiolocation operations below 2000 kHz and to accommodate new, spectrally efficient radiolocation technologies.

Respectfully submitted,

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